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An Axiomatization of the Proportional Rule in Financial Networks

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Abstract

The most important rule to determine payments in real-life bankruptcy problems is the proportional rule. Many such bankruptcy problems are characterized by network aspects, and the values of the agents' assets are endogenous as they depend on the extent to which claims on other agents can be collected. These network aspects make an axiomatic analysis challenging. This paper is the first to provide an axiomatization of the proportional rule in financial networks. Our main axiom is invariance to mitosis. The other axioms are claims boundedness, limited liability, priority of creditors, continuity, and impartiality.

This paper was accepted by Manel Baucells, decision analysis.

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